

Art Unit: 2856

## DETAILED ACTION

### Drawings

1. The drawings were received on 12/22/10. These drawings are accepted.

### Allowable Subject Matter

2. Claims 1-15 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Re claim 1, the independent claim includes "measuring an amount of the triple conjugate to quantify the analyte in the liquid sample, an amount of analytes is determined by passing a laser presented from a shape control lens for laser beam, presenting only a pure florescence component to a condenser lens to focus the pure fluorescence component to a center of a pinhole, removing light except for the parallel light at the pinhole, and comparing a fluorescence intensity of the triple analyte conjugate with a reference fluorescence intensity of the reference conjugate to quantify the analyte" in combination with the remaining claim limitation is not taught and/or made obvious by the prior art. **See remarks, pages 1-4, received on 12/22/10.** Nahm et al. (7,371, 582), considered closest to related art, teaches quantifying a plurality of analytes at the same time using a simple lateral flow assay strip (See abstract). Nahm et al. also teaches the amount of analytes is determined by passing light from a laser through an exciter filter, irradiating the filtered light to the epifluorescence medium containing the analyte conjugate and the reference conjugate. Nahm teaches comparing the analyte conjugate and the reference conjugate (Col. 3, lines 10-67; Col. 4, lines 1-1-12). **Nahm does not teach measuring an amount of the triple conjugate to quantify the analyte in the liquid sample, an amount of analytes is determined by passing a laser presented from a shape control lens for laser**

Art Unit: 2856

**beam, presenting only a pure fluorescence component to a condenser lens to focus the pure fluorescence component to a center of a pinhole, removing light except for the parallel light at the pinhole,** and comparing a fluorescence intensity of the triple analyte conjugate with a reference fluorescence intensity of the reference conjugate to quantify the analyte.

Re claim 5, the independent claim includes “an amount of analyte is determined by passing a laser presented from laser beam shape control lens, presenting only a pure fluorescence component to a condenser lens to focus the pure fluorescence component to a center of a pinhole, removing light except for the parallel light at the pinhole, and comparing a fluorescence intensity of the triple analyte conjugate with a reference fluorescence intensity of the reference conjugate to quantify the analyte” in combination with the remaining claim limitation is not taught and/or made obvious by the prior art. **See remarks, pages 1-4, received on 12/22/10.** Nahm et al. (7,371, 582), considered closest to related art, teaches quantifying a plurality of analytes at the same time using a simple lateral flow assay strip (See abstract). Nahm et al. also teaches the amount of analytes is determined by passing light from a laser through an exciter filter, irradiating the filtered light to the epifluorescence medium containing the analyte conjugate and the reference conjugate. Nahm teaches comparing the analyte conjugate and the reference conjugate (Col. 3, lines 10-67; Col. 4, lines 1-1-12). **Nahm does not teach measuring an amount of the triple conjugate to quantify the analyte in the liquid sample, an amount of analytes is determined by passing a laser presented from a shape control lens for laser beam, presenting only a pure fluorescence component to a condenser lens to focus the pure fluorescence component to a center of a pinhole, removing light except for the parallel light**

Art Unit: 2856

**at the pinhole**, and comparing a fluorescence intensity of the triple analyte conjugate with a reference fluorescence intensity of the reference conjugate to quantify the analyte.

Re claim 9, the independent claim includes “wherein the components of the detection device are arranged in a structure such that a laser presented from a lens for control of shape of a laser beam of the laser is passed through an exciter filter, presenting only a pure fluorescence component to a condenser lens to focus the pure fluorescence component to a center of a pinhole, removing light except for the parallel light at the pinhole, and comparing a fluorescence intensity of the triple analyte conjugate with a reference fluorescence intensity of the reference conjugate to quantify the analyte” in combination with the remaining claim limitation is not taught and/or made obvious by the prior art. **See remarks, pages 1-4, received on 12/22/10.** Nahm et al. (7,371, 582), considered closest to related art, teaches quantifying a plurality of analytes at the same time using a simple lateral flow assay strip (See abstract). Nahm et al. also teaches the amount of analytes is determined by passing light from a laser through an exciter filter, irradiating the filtered light to the epifluorescence medium containing the analyte conjugate and the reference conjugate. Nahm teaches comparing the analyte conjugate and the reference conjugate (Col. 3, lines 10-67; Col. 4, lines 1-1-12). **Nahm does not teach wherein the components of the detection device are arranged in a structure such that a laser presented from a lens for control of shape of a laser beam of the laser is passed through an exciter filter, and presenting only a pure fluorescence component to a condenser lens to focus the pure fluorescence component to a center of a pinhole, removing light except for the parallel light at the pinhole, and comparing a fluorescence intensity of the triple analyte conjugate with a reference fluorescence intensity of the reference conjugate to quantify the analyte.**

Art Unit: 2856

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMIKO D. BELLAMY whose telephone number is (571)272-2190. The examiner can normally be reached on Monday - Friday 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tamiko Bellamy  
/TB/  
Examiner  
April 5, 2011

Application/Control Number: 10/585,467

Page 6

Art Unit: 2856

/Hezron Williams/

Supervisory Patent Examiner, Art Unit 2856